

*Cyp = 3-Cyclopentylpropionyl-

FIGURE 1

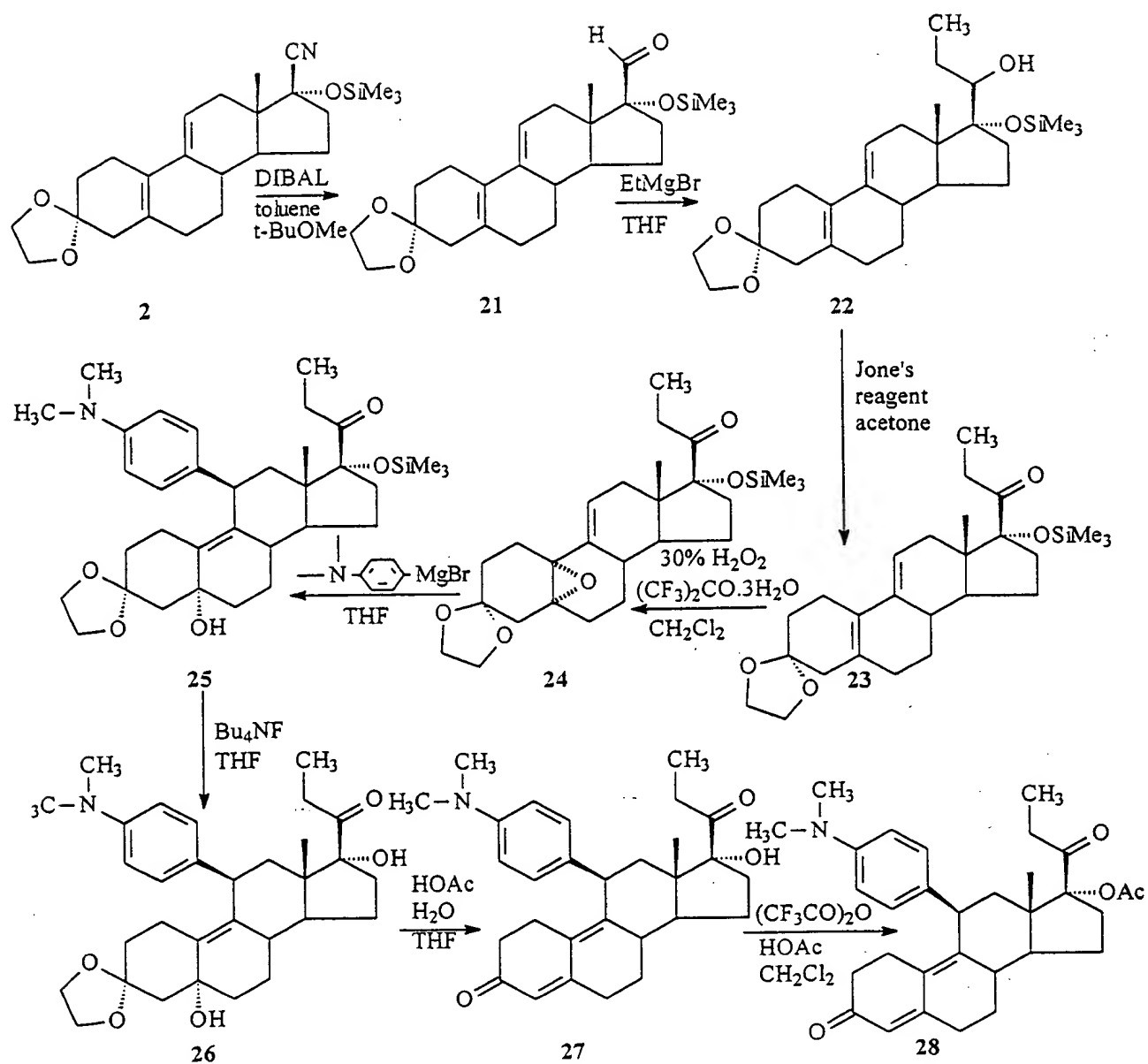
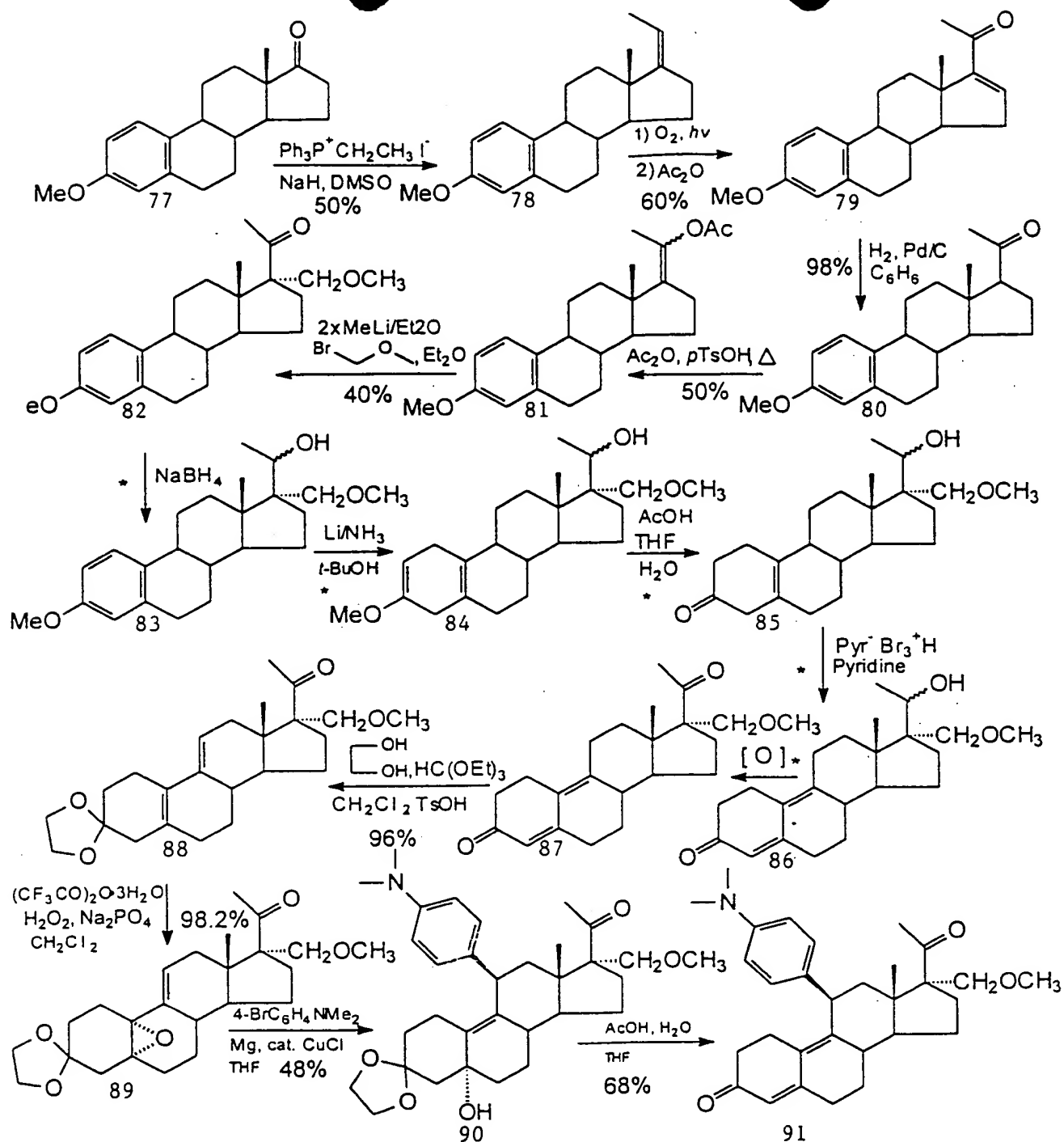


FIGURE 2

FIGURE 3



* Yield from 83 to 86 is 37%

Figure 5

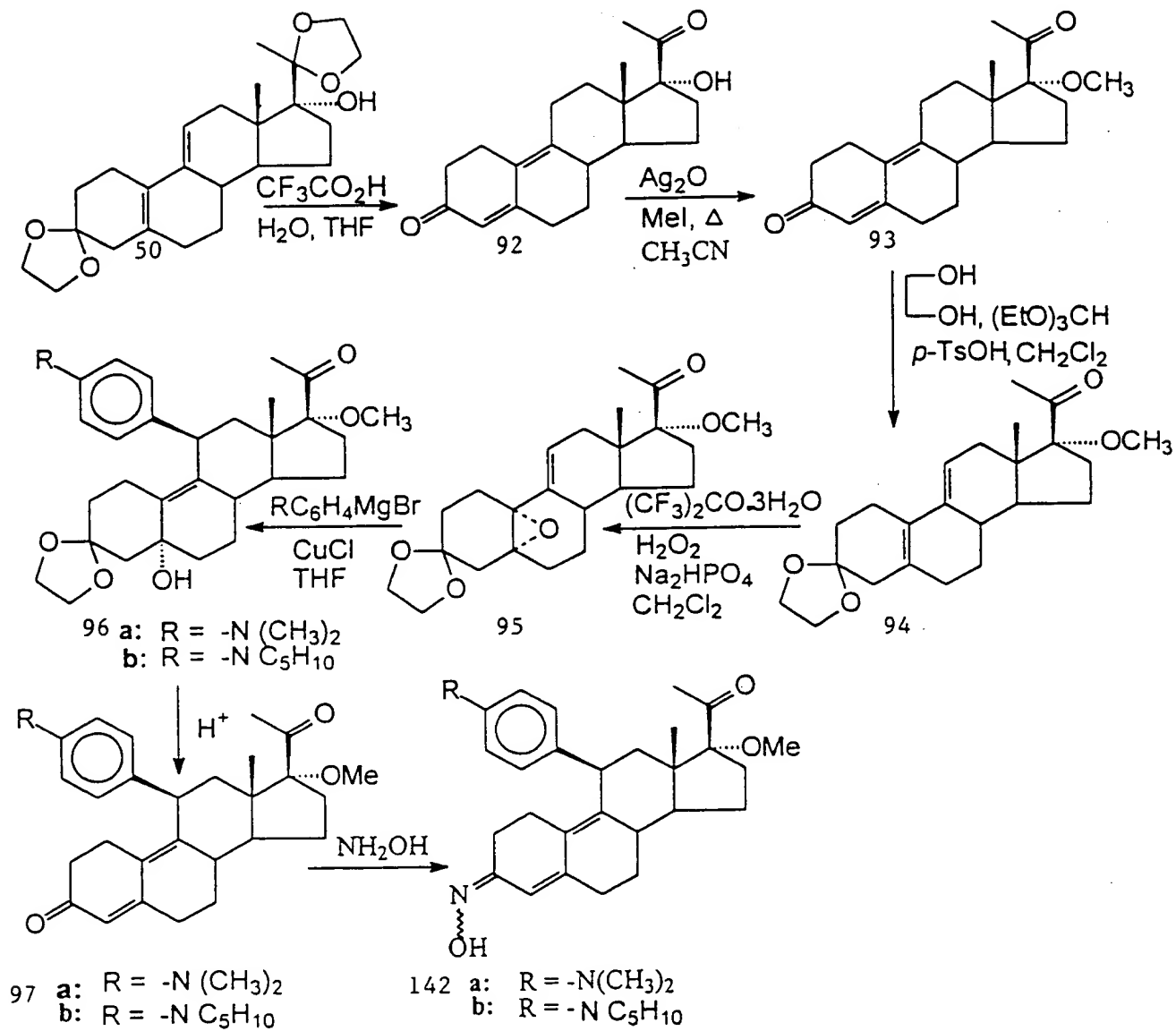


Figure 6

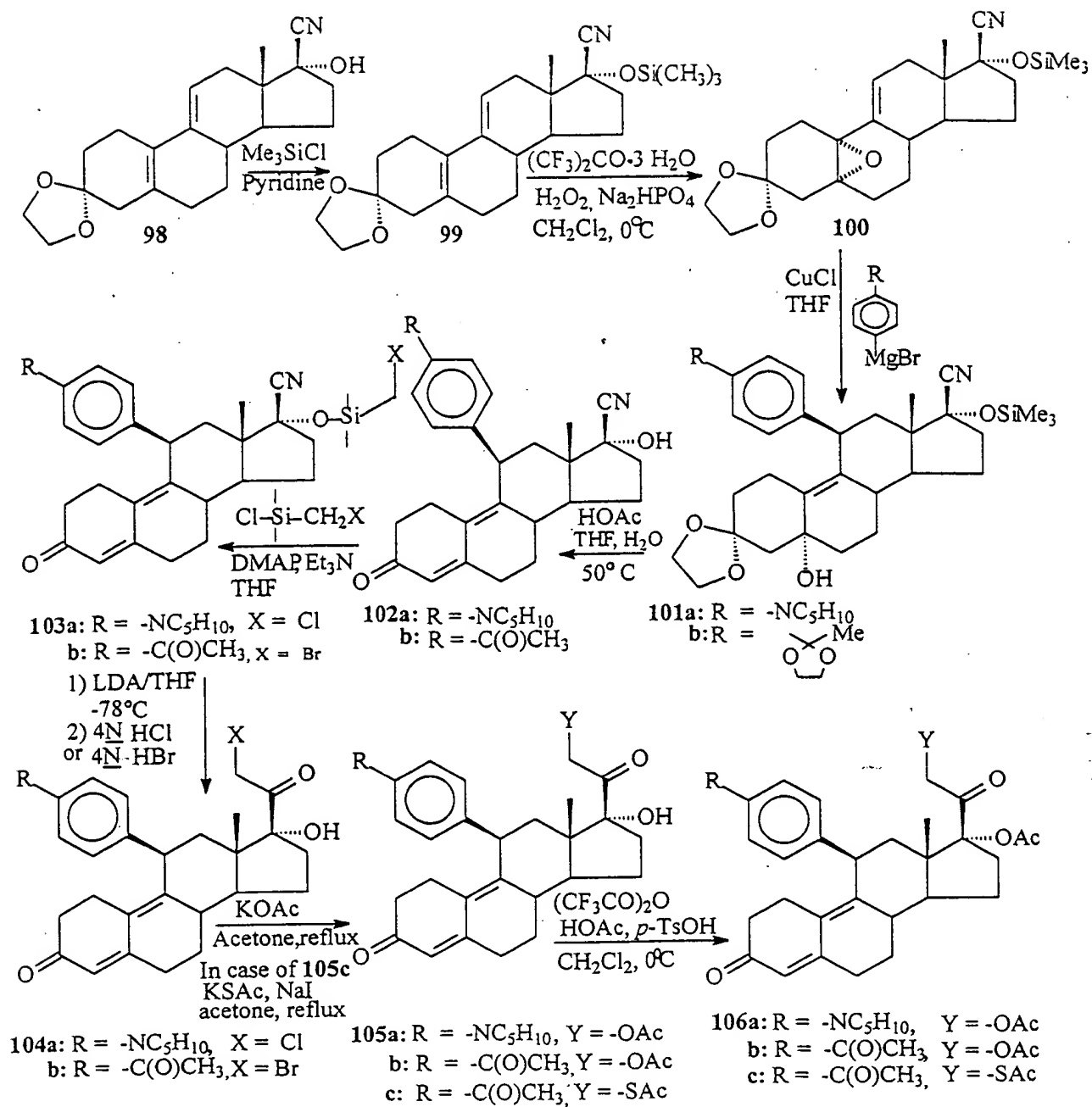


Figure 7

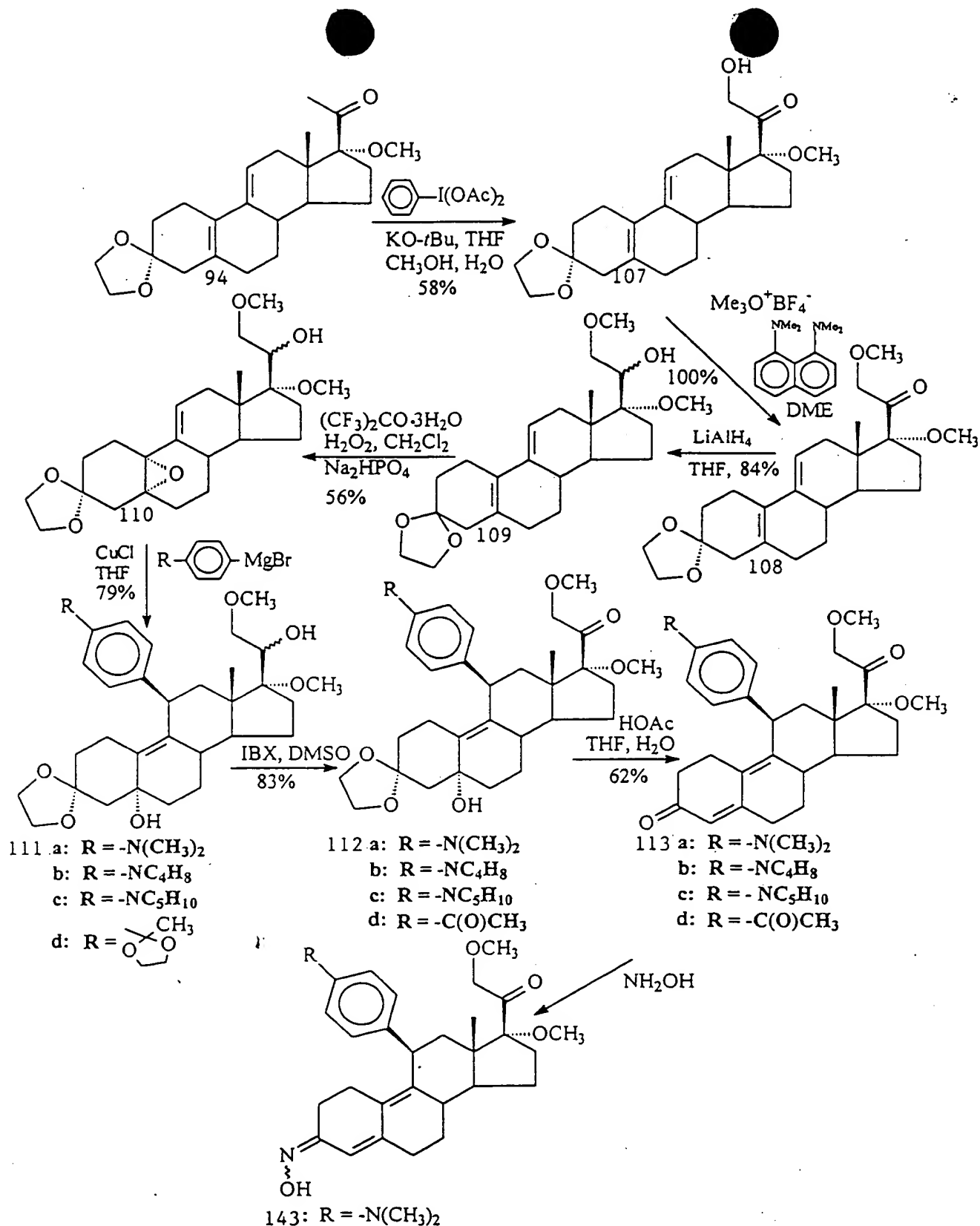


Figure 8

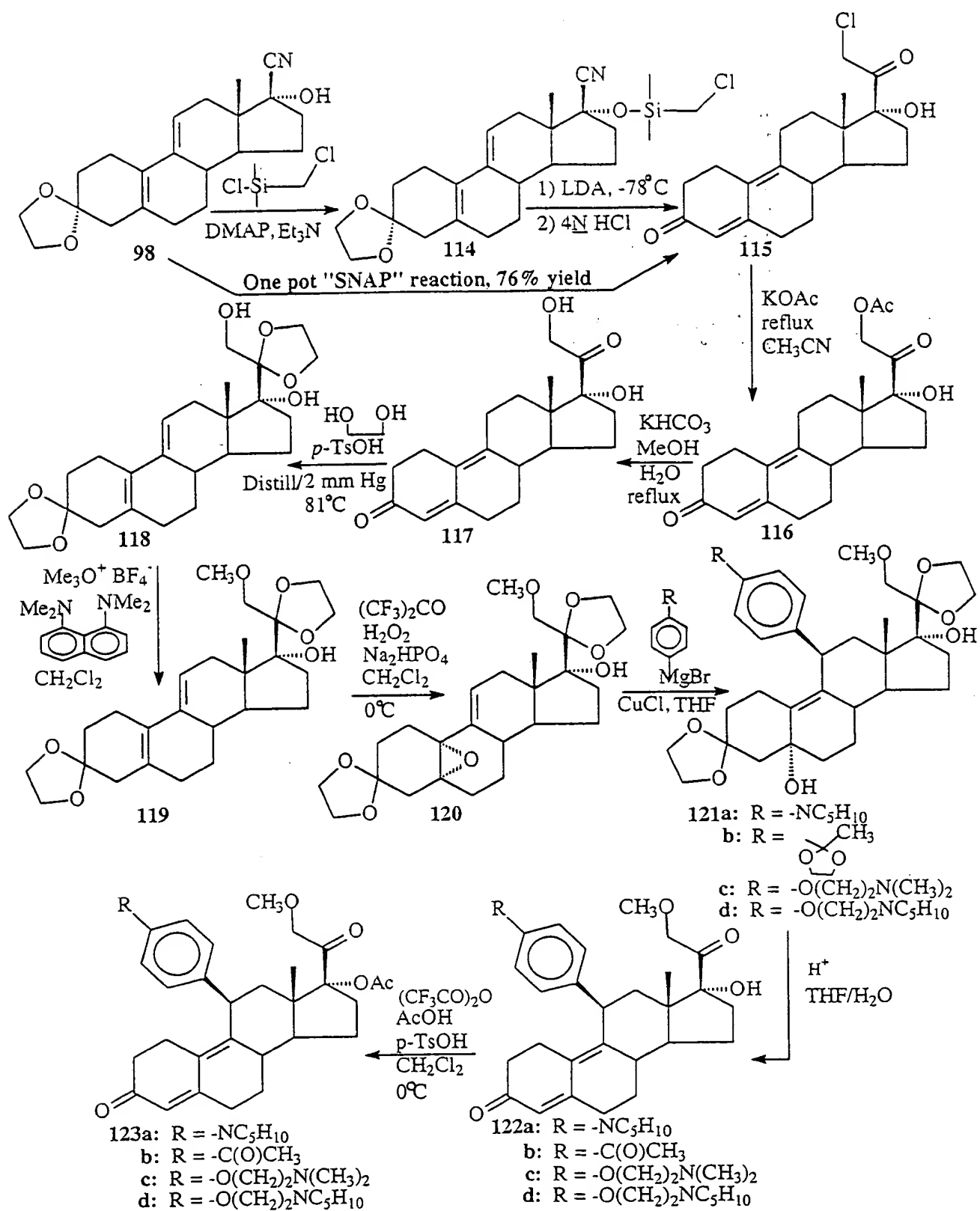


Figure 9

The reaction scheme illustrates the synthesis of compound 140 from compound 124. The process begins with compound 124, which features a 4-(dimethylaminophenyl) group and a 1-hydroxy-2-oxoethyl side chain. It is first treated with $(\text{ClCH}_2\text{C})_2\text{O}$ in pyridine to form intermediate 130, where the hydroxyl group is converted to a 2-chloroacetate ester. Compound 130 is then reacted with $(\text{CF}_3\text{CO})_2\text{O}$, HOAc, and Tonic acid in CH_2Cl_2 at 0°C to yield intermediate 131, which has an acetoxy group at the 1-position. Compound 131 is then treated with CH_3CN and NaI to form intermediate 132, where the acetoxy group is replaced by a 2-iodoacetate ester. Finally, compound 132 is reacted with $(\text{CH}_3)_2\text{NH}$ in THF at 0°C to produce intermediate 133, which has a dimethylaminoacetate side chain. Compound 133 is then treated with HCO_2H and HClO_4 to form intermediate 139, which has a dimethylaminoacetate side chain. Finally, compound 139 is treated with HCO_2H and HClO_4 to yield compound 140, which has a dimethylaminoacetate side chain.

Figure 10

Figure 11